

Amendments to the Specification

Please insert the following paragraph at page 1, line 4:

CROSS REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application No. 60/434,265, filed December 17, 2002.

Please amend the paragraph starting at page 15, line 1 as follows:

A SPDT (single pole, double throw) switch ~~S1~~ T1 has a pole connected to a constant current source I_{CS} , a first contact connected to the junction of resistors $R1_A$ and $R0$ and a second contact connected to the conducting element of cable $C1$. Cable $C1$ comprises a single conductive element preferably enclosed within a shielding means, where the shielding means is connected to ground. The single conductive element of cable $C1$ is coupled to the emitter of transistor $Q1$ via the other end of resistor $R1_B$. The other end of the single conductive element within cable $C1$ is connected to the same respective point in the other transceiver.

Please amend the paragraph starting at page 6, line 12 as follows:

The above-described system 100 of FIGURE 1 provides for a plurality of data acquisition devices 110, where each acquisition device provides a respective trigger signal determined according to the decoding or detection of sequential and/or logical conditions of its respective input channels. The external trigger controller 120 aggregates or combines the trigger enable signals TE_1 through TE_N produced by the data acquisition ~~units~~ devices 110₁ through 110_N to produce a combined trigger control signal T_C . The combined trigger control signal T_C is then used by each of the data acquisition ~~units~~ devices 110 to control its respective acquisition function. In this manner, a trigger condition having sequential or combinational logic characteristics that exceed the capabilities of any one instrument, such as a DSO or other data acquisition device is realized. For example, a user may suspect that his system under test may be experiencing problems only under certain conditions. In this example those conditions are a "runt" (i.e., less than full amplitude) signal occurring when his eight data lines are in the state 10100101. Thus, the user will preprogram external trigger controller 120 to generate a combined trigger only when both of the above conditions are true. Note that all eight data lines (four from each of two oscilloscopes) are logically combined and further combined with the detection of an analog trigger condition (i.e., runt), an outcome heretofore not possible.

Please amend the paragraph starting at page 9, line 30 as follows:

A DSO or other data acquisition device 110 according to an embodiment of the invention includes a triggering system having the ability to deliver a trigger enable signal TE or other indicium of a decoded or detected triggering event to an external trigger controller independent of the event that it is used to trigger the DSO. Thus, in the data acquisition ~~units~~ devices 110 of FIGURE 1, first 111 and second 112 event decoders are used. The first event decoder 111 is adapted to decode or otherwise determine that a triggering event has occurred and, further, to provide indicium of that triggering event to the external trigger controller 120. The second event decoder 112 preferably decodes or determines the occurrence of the same triggering event and responsively produces a triggering signal T adapted to control the acquisition unit 113.

Please amend the paragraph starting at page 13, line 23 as follows:

The controller/logic element 125 processes the data received from the transceivers 128 and responsively produces an output signal indicative of such logical processing. The output signal is provided to each of the transceivers 128 for subsequent propagation back to the corresponding acquisition devices 110. In one embodiment of the invention, the controller/logic element 125 comprises an AND gate, the transceivers 128 provide a logical high signal indicative of decoded trigger events at corresponding acquisition ~~units~~ devices 110. When all transceivers indicate respective trigger decoder events have occurred, the controller/logic element 125 responsively produces a logic high signal which is propagated back to the acquisition devices 110 via the transceivers 128. The operation of the transceivers 118 and 128 will be described in more detail below with respect to FIGS. 5-6.